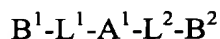


**WHAT IS CLAIMED IS:**

1. A compound of the formula



I

wherein:

A<sup>1</sup> is a member selected from the group consisting of alkylene, alkenylene, alkynylene, cycloalkylene, cycloalkenylene, arylene, heteroarylene, heterocycloalkylene, and heterocycloalkenylene, or, alternatively, A<sup>1</sup> represents a single or double bond linking L<sup>1</sup> and L<sup>2</sup>;

L<sup>1</sup> and L<sup>2</sup> are each independently a member selected from the group consisting of O-, -S-, -N(R<sup>1</sup>)-, -C(O)-, -C(O)N(R<sup>1</sup>)-, -O-alkylene-, -S-alkylene-, -N(R<sup>1</sup>)-alkylene, -C(O)-alkylene, -C(O)N(R<sup>1</sup>)-alkylene, -C(O)-O-alkylene, alkylene, alkenylene, alkynylene, cycloalkylene, cycloalkenylene, arylene, heteroarylene, heterocycloalkylene, and heterocycloalkenylene;

B<sup>1</sup> and B<sup>2</sup> are each independently a member selected from the group consisting of alkyl, cycloalkyl, cycloalkenyl, aryl, heteroaryl, heterocycloalkyl, and heterocycloalkenyl;

alternatively, L<sup>1</sup> can be additionally linked to B<sup>1</sup> via a group X<sup>1</sup> to form a 5-9 member ring; and L<sup>2</sup> can be additionally linked to B<sup>2</sup> via a group X<sup>2</sup> to form a 5-9 member ring;

X<sup>1</sup> and X<sup>2</sup> are each independently a member selected from the group consisting of -O-, -S-, -N(R<sup>2</sup>)-, -C(O)-, -C(O)N(R<sup>2</sup>)-, -O-alkylene, -S-alkylene, -N(R<sup>2</sup>)-alkylene, -C(O)-alkylene, -C(O)N(R<sup>2</sup>)-alkylene, and -C(O)-O-alkylene; and

R<sup>1</sup> and R<sup>2</sup> are each independently a member selected from the group consisting of hydrogen, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, arylalkyl, aryl(heteroalkyl), (heteroaryl)alkyl, and (heteroaryl)heteroalkyl.

2. The compound of claim 1, wherein

A<sup>1</sup> is a member selected from the group consisting of (C<sub>1</sub>-C<sub>8</sub>)alkylene, arylene, heteroarylene and a single bond;

L<sup>1</sup> and L<sup>2</sup> are each independently a member selected from the group consisting of -C(O)- and -C(O)N(R<sup>1</sup>)-;

6 R<sup>1</sup> is a member selected from the group consisting of (C<sub>5</sub>-C<sub>8</sub>)cycloalkyl,  
7 aryl, heteroaryl, aryl(C<sub>1</sub>-C<sub>4</sub>)alkyl, and (heteroaryl)(C<sub>1</sub>-C<sub>4</sub>)alkyl; and

8 B<sup>1</sup> and B<sup>2</sup> are each independently a member selected from the group  
9 consisting of aryl, heteroaryl, aryl(C<sub>1</sub>-C<sub>4</sub>)alkyl, (heteroaryl)(C<sub>1</sub>-C<sub>4</sub>)alkyl, (C<sub>1</sub>-C<sub>8</sub>)alkyl,  
10 and (C<sub>5</sub>-C<sub>8</sub>)cycloalkyl.

1 3. The compound of claim 1, wherein

2 A<sup>1</sup> is a member selected from the group consisting of (C<sub>1</sub>-C<sub>8</sub>)alkylene,  
3 phenylene, divalent pyridine and a single bond;

4 L<sup>1</sup> and L<sup>2</sup> are each independently a member selected from the group  
5 consisting of -C(O)- and -C(O)N(R<sup>1</sup>)-;

6 R<sup>1</sup> is optionally substituted (C<sub>5</sub>-C<sub>8</sub>)cycloalkyl, optionally substituted  
7 phenyl, optionally substituted benzyl, and (C<sub>1</sub>-C<sub>8</sub>)alkyl; and

8 B<sup>1</sup> and B<sup>2</sup> are each independently a member selected from the group  
9 consisting of optionally substituted (C<sub>5</sub>-C<sub>8</sub>)cycloalkyl, optionally substituted phenyl, and  
10 optionally substituted benzyl.

1 4. The compound of claim 1, wherein

2 A<sup>1</sup> is a member selected from the group consisting of alkylene, arylene,  
3 heteroarylene and a single bond;

4 L<sup>1</sup> and L<sup>2</sup> are each -C(O)N(R<sup>1</sup>)-;

5 R<sup>1</sup> is a member selected from the group consisting of aryl, heteroaryl,  
6 arylalkyl, and (heteroaryl)alkyl; and

7 B<sup>1</sup> and B<sup>2</sup> are each independently a member selected from the group  
8 consisting of aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl, alkyl, and cycloalkyl.

1 5. The compound of claim 1, wherein

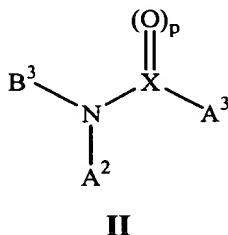
2 A<sup>1</sup> is a heteroarylene group containing two fused rings;

3 L<sup>1</sup> and L<sup>2</sup> are each independently a member selected from the group  
4 consisting of -O-, -NH-, and -N(R<sup>1</sup>)-;

5 R<sup>1</sup> is a member selected from the group consisting of alkyl and  
6 heteroalkyl; and

7 B<sup>1</sup> and B<sup>2</sup> are each independently a member selected from the group  
8 consisting of aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl, alkyl, and cycloalkyl.

6. A compound of the formula



wherein:

$\text{A}^2$  and  $\text{A}^3$  are each independently a member selected from the group consisting of alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl, aryl(heteroalkyl), and (heteroaryl)heteroalkyl;

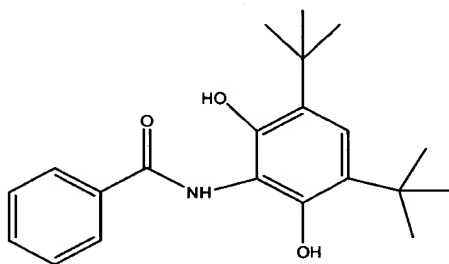
$\text{B}^3$  is a member selected from the group consisting of hydrogen, -alkylene- $\text{C}(\text{O})\text{R}^3$ ,  $-\text{C}(\text{O})\text{R}^3$ , alkylene- $\text{C}(\text{O})\text{N}(\text{R}^3\text{R}^4)$ ,  $-\text{C}(\text{O})\text{N}(\text{R}^3\text{R}^4)$ , alkylene- $\text{S}(\text{O})_n\text{N}(\text{R}^3\text{R}^4)$ ,  $-\text{S}(\text{O})_n\text{N}(\text{R}^3\text{R}^4)$ , alkylene- $\text{N}(\text{R}^3\text{R}^4)$ , alkylene- $\text{OR}^3$ , and  $-\text{C}(\text{O})\text{OR}^3$ ;

$\text{R}^3$  and  $\text{R}^4$  are each independently a member selected from the group consisting of hydrogen, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl, aryl(heteroalkyl), and (heteroaryl)heteroalkyl;

$\text{X}$  is a member selected from the group consisting of C, S, and N; and

the subscripts  $n$  and  $p$  are each independently an integer from 0-2,

provided that the following compound is excluded:



7. The compound of claim 6, wherein

$\text{A}^2$  and  $\text{A}^3$  are each independently a member selected from the group consisting of aryl and heteroaryl;

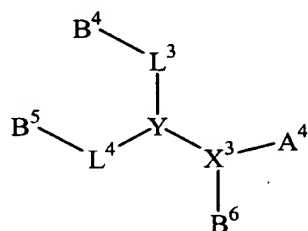
$\text{B}^3$  is a member selected from the group consisting of alkylene- $\text{C}(\text{O})\text{N}(\text{R}^3\text{R}^4)$ , and alkylene- $\text{S}(\text{O})_n\text{N}(\text{R}^3\text{R}^4)$ ;

wherein  $\text{R}^3$  is arylalkyl or (heteroaryl)alkyl;

7  $R^4$  is hydrogen;  
8 X is S; and  
9 n is 2.

1 8. The compound of claim 6, wherein  
2  $A^2$  is an aryl group substituted *ortho* to the nitrogen with a member  
3 selected from the group consisting of  $-OH$ ,  $-NH_2$ ,  $-NHC(O)$ -alkyl,  $-NHSO_2$ -alkyl;  
4  $A^3$  is a member selected from the group consisting of aryl and heteroaryl;  
5  $B^3$  is hydrogen;  
6 X is C; and  
7 p is 1.

1 9. A compound of the formula:



III

4 wherein:

5  $A^4$  is a member selected from the group consisting of hydrogen,  $-C(O)R^5$ ,  $-C(O)N(R^5R^6)$ ,  $-S(O)_nN(R^5R^6)$ ,  $-alkylene-N(R^5R^6)$ ,  $-alkylene-OR^5$  and  $-C(O)OR^5$ ;

7  $L^3$  and  $L^4$  are each independently a member selected from the group  
8 consisting of a single bond,  $-C(O)-$ ,  $-S(O)_p-$ , and alkylene, wherein the subscript p is an  
9 integer from 0-2;

10  $B^4$ ,  $B^5$  and  $B^6$  are each independently a member selected from the group  
11 consisting of hydrogen, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl,  
12 fused-benzoheterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl,  
13 arylalkyl, aryl(heteroalkyl), (heteroaryl)alkyl, and (heteroaryl)heteroalkyl;

14 alternatively,  $B^4$  and  $B^5$  join to form a divalent arylene, heteroarylene,  
15 alkylene, or cycloalkylene linkage between  $L^3$  and  $L^4$ , and  $B^6$  is a member selected from  
16 the group consisting of hydrogen, alkyl, heteroalkyl, heterocycloalkyl, arylalkyl, or  
17 (heteroaryl)alkyl.

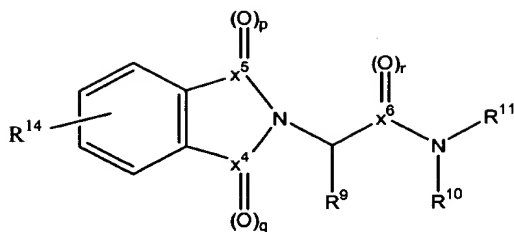
18  $X^3$  and Y are each independently a trivalent nitrogen atom or a trivalent or  
19 tetravalent carbon atom; and

20 R<sup>5</sup> and R<sup>6</sup> are each independently a member selected from the group  
21 consisting of hydrogen, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl,  
22 heterocycloalkenyl, aryl, heteroaryl, arylalkyl, aryl(heteroalkyl), (heteroaryl)alkyl, and  
23 (heteroaryl)heteroalkyl.

1 10. The compound of claim 9, wherein  
2 A<sup>4</sup> is a member selected from the group consisting of hydrogen, -  
3 C(O)N(R<sup>5</sup>R<sup>6</sup>) and -S(O)<sub>2</sub>N(R<sup>5</sup>R<sup>6</sup>);  
4 R<sup>5</sup> and R<sup>6</sup> are each independently a member selected from the group  
5 consisting of alkyl, cycloalkyl, and heterocycloalkyl;  
6 L<sup>3</sup> and L<sup>4</sup> are each independently a member selected from the group  
7 consisting of -C(O)-, -S(O)<sub>2</sub>-, and lower alkylene;  
8 B<sup>4</sup> and B<sup>5</sup> join to form an arylene or heteroarylene linkage between L<sup>3</sup> and  
9 L<sup>4</sup>;  
10 X is tetravalent carbon in the *R* configuration;  
11 Y is trivalent nitrogen; and  
12 B<sup>6</sup> is a member selected from the group consisting of hydrogen, alkyl,  
13 heteroalkyl, heterocycloalkyl, arylalkyl, or (heteroaryl)alkyl.

1 11. The compound of claim 9, wherein  
2 A<sup>4</sup> is a member selected from the group consisting of hydrogen, -  
3 C(O)N(R<sup>5</sup>R<sup>6</sup>) and -S(O)<sub>2</sub>N(R<sup>5</sup>R<sup>6</sup>);  
4 R<sup>5</sup> and R<sup>6</sup> are each independently a member selected from the group  
5 consisting of alkyl, cycloalkyl, and heterocycloalkyl;  
6 L<sup>3</sup> and L<sup>4</sup> are each independently a member selected from the group  
7 consisting of -C(O)-, -S(O)<sub>2</sub>-, and lower alkylene;  
8 B<sup>4</sup> and B<sup>5</sup> are each independently a member selected from the group  
9 consisting of hydrogen, alkyl, arylalkyl, aryl, and heteroaryl;  
10 X is tetravalent carbon in the *R* configuration;  
11 Y is trivalent nitrogen; and  
12 B<sup>6</sup> is a member selected from the group consisting of hydrogen, alkyl,  
13 heteroalkyl, heterocycloalkyl, arylalkyl, and (heteroaryl)alkyl.

1 12. The compound of claim 9, said compound having the formula



**IIIa**

wherein:

$X^4$ ,  $X^5$  and  $X^6$  are each independently C or S;

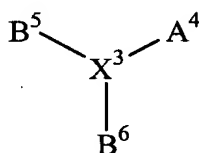
$R^{10}$  and  $R^{11}$  are each independently alkyl, cycloalkyl, or heterocycloalkyl;

$R^9$  is an optionally substituted aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl, heterocycloalkyl;

$R^{14}$  is selected from hydrogen, halogen, alkyl, alkoxy, alkylamino, alkylthio, acyl, cycloalkyl and aryl; and

the subscripts p, q, and r are each independently integers from 0-2.

13. A compound of the formula:



**IIIb**

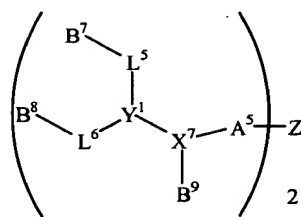
wherein:

$A^4$  is a member selected from the group consisting of hydrogen,  $-C(O)R^5$ ,  $-C(O)N(R^5R^6)$ ,  $-S(O)_nN(R^5R^6)$ ,  $-alkylene-N(R^5R^6)$ ,  $-alkylene-OR^5$  and  $-C(O)OR^5$ ;

$B^5$  and  $B^6$  are members independently selected from the group consisting of hydrogen, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, fused-benzoheterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, arylalkyl, aryl(heteroalkyl), (heteroaryl)alkyl and (heteroaryl)heteroalkyl; and

$X^3$  is a trivalent nitrogen atom or a trivalent or tetravalent carbon atom.

14. A compound of the formula:



IV

wherein:

A<sup>5</sup> is a member selected from the group consisting of -C(O)-, -alkylene-, -S(O)<sub>n</sub>-, -C(O)N(R<sup>12</sup>)-, -S(O)<sub>2</sub>N(R<sup>12</sup>)-, -alkylene-N(R<sup>12</sup>)-, -alkylene-O-, and -C(O)O-;

L<sup>5</sup> and L<sup>6</sup> are each independently a member selected from the group consisting of -C(O)-, -S(O)<sub>n</sub>-, and alkylene, wherein the subscript n is an integer from 0-2;

B<sup>7</sup>, B<sup>8</sup>, and B<sup>9</sup> are each independently a member selected from the group consisting of alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, benzoheterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, arylalkyl, aryl(heteroalkyl), (heteroaryl)alkyl, and (heteroaryl)heteroalkyl;

alternatively, B<sup>7</sup> and B<sup>8</sup> join to form a divalent arylene, heteroarylene, alkylene, or cycloalkylene linkage between L<sup>5</sup> and L<sup>6</sup>;

Z is a member selected from the group consisting of alkylene, heteroalkylene, cycloalkylene, and heterocycloalkylene;

X<sup>7</sup> and Y<sup>1</sup> are each independently a trivalent nitrogen atom or a trivalent or tetravalent carbon atom; and

R<sup>12</sup> is a member selected from the group consisting of hydrogen, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, arylalkyl, aryl(heteroalkyl), (heteroaryl)alkyl, and (heteroaryl)heteroalkyl.

15. The compound of claim 14, wherein

A<sup>5</sup> is a member selected from the group consisting of -C(O)-, -C(O)N(R<sup>12</sup>)- and -S(O)<sub>2</sub>N(R<sup>12</sup>)-;

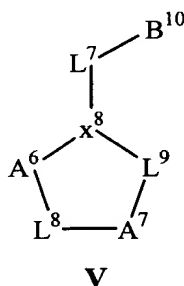
R<sup>12</sup> is a member selected from the group consisting of alkyl, cycloalkyl, and heterocycloalkyl;

B<sup>7</sup> and B<sup>8</sup> are joined in an arylene or heteroarylene linkage between L<sup>5</sup> and L<sup>6</sup>;

B<sup>9</sup> is a member selected from the group consisting of alkyl, heteroalkyl, heterocycloalkyl, arylalkyl, and (heteroaryl)alkyl;

10 Z is alkylene, heteroalkylene, or heterocycloalkylene;  
 11 L<sup>5</sup> and L<sup>6</sup> are each independently a member selected from the group  
 12 consisting of -C(O)-, -S(O)<sub>2</sub>-, or lower alkylene;  
 13 X<sup>7</sup> is tetravalent carbon; and  
 14 Y<sup>1</sup> is trivalent nitrogen.

1 16. A compound of the formula:



2 wherein:

3 A<sup>6</sup> and A<sup>7</sup> are each independently a member selected from the group  
 4 consisting of arylene, heteroarylene, cycloalkylene, and heterocycloalkylene;

5 B<sup>10</sup> is a member selected from the group consisting of aryl, heteroaryl,  
 6 arylalkyl, (heteroaryl)alkyl, alkyl, cycloalkyl, cycloalkenyl, heteroalkyl, heterocycloalkyl,  
 7 and heterocycloalkenyl;

8 L<sup>7</sup>, L<sup>8</sup>, and L<sup>9</sup> are each independently a member selected from the group  
 9 consisting of -O-, -S-, -N(R<sup>13</sup>), -C(O)-, -S(O)-, -S(O)<sub>2</sub>-, alkylene, -O-alkylene, -S-  
 10 alkylene, -N(R<sup>13</sup>)-alkylene, -C(O)-alkylene, -C(O)N(R<sup>13</sup>)-alkylene, -C(O)-O-alkylene, a  
 11 single bond, and a double bond;

12 X<sup>8</sup> is a member selected from the group consisting of N, and CR<sup>13</sup>; and

13 R<sup>13</sup> is a member selected from the group consisting of hydrogen, alkyl,  
 14 heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl,  
 15 heteroaryl, arylalkyl, and (heteroaryl)alkyl.

1 17. The compound of claim 16, wherein

2 A<sup>6</sup> and A<sup>7</sup> are each independently a member selected from the group  
 3 consisting of aryl, heteroaryl, cycloalkyl, and heterocycloalkyl;

4 B<sup>10</sup> is a member selected from the group consisting of aryl, heteroaryl,  
 5 arylalkyl, and (heteroaryl)alkyl;

6 L<sup>7</sup> and L<sup>8</sup> are each independently a member selected from the group  
 7 consisting of -C(O)-, -S(O)-, and -S(O)<sub>2</sub>-;



L<sup>9</sup> is a member selected from the group consisting of -C(O)-, alkylene, and a single bond; and

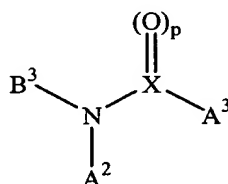
X<sup>5</sup> is N.

18. A pharmaceutical composition, said pharmaceutical composition comprising:

- a) a compound of claim 1; and
- b) a pharmaceutically acceptable carrier or excipient.

19. A pharmaceutical composition, said pharmaceutical composition comprising:

- a) a compound of the formula



wherein:

A<sup>2</sup> and A<sup>3</sup> are each independently a member selected from the group consisting of alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl, aryl(heteroalkyl), and (heteroaryl)heteroalkyl;

B<sup>3</sup> is a member selected from the group consisting of hydrogen, -alkylene-C(O)R<sup>3</sup>, -C(O)R<sup>3</sup>, alkylene-C(O)N(R<sup>3</sup>R<sup>4</sup>), -C(O)N(R<sup>3</sup>R<sup>4</sup>), alkylene-S(O)<sub>n</sub>N(R<sup>3</sup>R<sup>4</sup>), -S(O)<sub>n</sub>N(R<sup>3</sup>R<sup>4</sup>), alkylene-N(R<sup>3</sup>R<sup>4</sup>), alkylene-OR<sup>3</sup>, and -C(O)OR<sup>3</sup>;

R<sup>3</sup> and R<sup>4</sup> are each independently a member selected from the group consisting of hydrogen, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl, aryl(heteroalkyl), and (heteroaryl)heteroalkyl;

X is a member selected from the group consisting of C, S, and N; and the subscripts n and p are each independently an integer from 0-2; and

- b) a pharmaceutically acceptable carrier or excipient.

1 20. A pharmaceutical composition, said pharmaceutical composition  
2 comprising:

- 3 a) a compound of claim 9; and  
4 b) a pharmaceutically acceptable carrier or excipient.

1 21. A pharmaceutical composition, said pharmaceutical composition  
2 comprising:

- 3 a) a compound of claim 13; and  
4 b) a pharmaceutically acceptable carrier or excipient.

1 22. A pharmaceutical composition, said pharmaceutical composition  
2 comprising:

- 3 a) a compound of claim 14; and  
4 b) a pharmaceutically acceptable carrier or excipient.

1 23. A pharmaceutical composition, said pharmaceutical composition  
2 comprising:

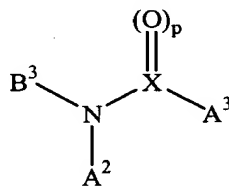
- 3 a) a compound of claim 16; and  
4 b) a pharmaceutically acceptable carrier or excipient.

1 24. A method for treating a FXR-mediated disease in a mammal, said  
2 method comprising:

3 administering a compound of claim 1, thereby treating a FXR-mediated  
4 disease in a mammal.

1 25. A method for treating a FXR-mediated disease in a mammal, said  
2 method comprising:

3 administering a compound of the formula



II

6 wherein:



A<sup>2</sup> and A<sup>3</sup> are each independently a member selected from the group consisting of alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl, aryl(heteroalkyl), and (heteroaryl)heteroalkyl;

B<sup>3</sup> is a member selected from the group consisting of hydrogen, -alkylene-C(O)R<sup>3</sup>, -C(O)R<sup>3</sup>, alkylene-C(O)N(R<sup>3</sup>R<sup>4</sup>), -C(O)N(R<sup>3</sup>R<sup>4</sup>), alkylene-S(O)<sub>n</sub>N(R<sup>3</sup>R<sup>4</sup>), -S(O)<sub>n</sub>N(R<sup>3</sup>R<sup>4</sup>), alkylene-N(R<sup>3</sup>R<sup>4</sup>), alkylene-OR<sup>3</sup>, and -C(O)OR<sup>3</sup>;

R<sup>3</sup> and R<sup>4</sup> are each independently a member selected from the group consisting of hydrogen, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl, aryl(heteroalkyl), and (heteroaryl)heteroalkyl;

X is a member selected from the group consisting of C, S, and N; and the subscripts n and p are each independently an integer from 0-2; thereby treating a FXR-mediated disease in a mammal.

26. A method for treating a FXR-mediated disease in a mammal, said method comprising:  
administering a compound of claim 9, thereby treating a FXR-mediated disease in a mammal.

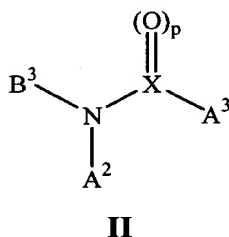
27. A method for treating a FXR-mediated disease in a mammal, said method comprising:  
administering a compound of claim 13, thereby treating a FXR-mediated disease in a mammal.

28. A method for treating a FXR-mediated disease in a mammal, said method comprising:  
administering a compound of claim 14, thereby treating a FXR-mediated disease in a mammal.

29. A method for treating a FXR-mediated disease in a mammal, said method comprising:  
administering a compound of claim 16, thereby treating a FXR-mediated disease in a mammal.

1                   30.     A method for modulating *cyp7a* expression levels in a mammal,  
2 said method comprising:  
3                   administering a compound of claim 1, thereby modulating *cyp7a*  
4 expression levels in a mammal.

1                   31.     A method for modulating *cyp7a* expression levels in a mammal,  
2 said method comprising:  
3                   administering a compound of the formula



6                   wherein:  
7                   A<sup>2</sup> and A<sup>3</sup> are each independently a member selected from the group  
8 consisting of alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl,  
9 heterocycloalkenyl, aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl, aryl(heteroalkyl), and  
10 (heteroaryl)heteroalkyl;

11                   B<sup>3</sup> is a member selected from the group consisting of hydrogen, -alkylene-  
12 C(O)R<sup>3</sup>, -C(O)R<sup>3</sup>, alkylene-C(O)N(R<sup>3</sup>R<sup>4</sup>), -C(O)N(R<sup>3</sup>R<sup>4</sup>), alkylene-S(O)<sub>n</sub>N(R<sup>3</sup>R<sup>4</sup>), -  
13 S(O)<sub>n</sub>N(R<sup>3</sup>R<sup>4</sup>), alkylene-N(R<sup>3</sup>R<sup>4</sup>), alkylene-OR<sup>3</sup>, and -C(O)OR<sup>3</sup>;

14                   R<sup>3</sup> and R<sup>4</sup> are each independently a member selected from the group  
15 consisting of hydrogen, alkyl, heteroalkyl, cycloalkyl, heterocycloalkyl, cycloalkenyl,  
16 heterocycloalkenyl, aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl, aryl(heteroalkyl), and  
17 (heteroaryl)heteroalkyl;

18                   X is a member selected from the group consisting of C, S, and N; and  
19                   the subscripts n and p are each independently an integer from 0-2;  
20 thereby modulating *cyp7a* expression levels in a mammal.

1                   32.     A method for modulating *cyp7a* expression levels in a mammal,  
2 said method comprising:  
3                   administering a compound of claim 9, thereby modulating *cyp7a*  
4 expression levels in a mammal.

